REMARKS/ARGUMENTS

The foregoing proposed amendment presents amended claims 1, 13, and 27. Claims 1-24 and 26-28 remain. Claim 25 has been cancelled.

Claims 1, 5, 6, 13-24 and 26-28 were rejected under 35 U.S.C. section 103(a) as being unpatentable over Japan Patent No. 2002-223076, by Koju ("Koju"). Koju represents a completely different process and structure than the claimed invention. Koju fails to include first and second adhesive layers as recited and certainly fails to teach, suggest, or contemplate a biasing of carriers such that the first and second adhesive layers flow into the via around the embedded component. Although the examiner fails to find the use of adhesives as recited in claim 5 as being non-obvious, such adhesives used in a non-obvious manner as recited in the methods claims herein (as amended) enable the non-obvious structure recited in the apparatus claims (as amended).

As the Examiner noted, claims 2-4, 7-12 and 25 were rejected to as being dependent upon a rejected base claim, but would be found allowable if rewritten in independent form. In this regard, the element of claim 11 of having the first and second adhesive layers in the via around the embedded component has been incorporated into independent claim 1. Likewise, the limitation of claim 25 has been incorporated into amended claim 13. Koju, at best, teaches only a first adhesive layer and certainly fails to teach the step of biasing first and second carriers toward each other to provide the substrate assembly having the embedded component. It is further noted that Koju, as far as can be determined from the structures and the steps shown in FIGs. 1-6 therein, fails to enable a direct via interconnection from the embedded component to a first or second conductive layer. The process used in Koju requires intermediary connections that are not necessarily required in the present invention in certain embodiments. In the Koju process, there is never an opening through conductive and adhesive layers providing exposure to the conductive surface of the embedded component as recited in claim 2.

Koju connects the via connection 28 to the component contact or electrode 11 through multiple conductive layers (16 and 22) that are part of the built-up layers therein.

Finally, with regard to claims 26, note this claim includes the step of biasing the first and second carriers towards each other to create the substrate assembly having the embedded component between the first and second adhesive layers. As noted above, Koju fails to include first and second adhesive layers and certainly fails to teach or suggest or contemplate the step of biasing carriers to provide an embedded component that exists between first and second adhesive layers. Likewise, claims 27-28 include a first and second adhesive layer, wherein at least a portion of the first adhesive layer lies below the embedded component and portions of the second adhesive layer lie above the embedded component. As noted above, Koju fails to include first and second adhesive layers.

Thus, the Applicant believes claims 1-24 and 26-28 as amended overcome the rejection under 35 U.S.C. section 103(a) as being unpatentable over Koju and consequently, an indication of allowability is respectfully requested. Should any minor points remain prior to the issuance of a Notice of Allowance, the Examiner is requested to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

Date: Feb. 18, 2005

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